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10/600,029	06/20/2003	Gary Schneider	40116/03701	6358

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EXAMINER	
REZA, MOHAMMAD W	
ART UNIT	PAPER NUMBER
2136	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/600,029	SCHNEIDER ET AL.	
	Examiner	Art Unit	
	MOHAMMAD W. REZA	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the arguments filed on 03/31/2008.

2. Claims 1-29 are pending in the application.

3. Claims 1-29 have been rejected.

Response to Amendment

4. The examiner approves the amendments made to claims 1, 10, 13, 21, 24-29.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. All the independent claims have been amended "Obtaining a PIN code form the user via the DCA, the PIN code identifying at least one device with which the first device is authorized to communicate". However, examiner found in the specification, "The HD 12 is a computing device that may include a wireless access port ("AP") 10 and a database ("DB") 14. The AP 10 and the arrangement 5 provide the wireless

connection between the HD 12 and the MU 2. The AP 10 and the arrangement 5 are capable of transmitting to, as well as receiving signals from each other. The DB 14 may contain a plurality of authorized PIN codes which correspond to authorized devices with which the HD 12 may communicate. **The PIN codes are prestored into the DB 14 prior to communications with any devices** (i.e., the MU 2) (paragraph 0012)." So, this portion of the specification clearly emphasis that the PIN codes are prestored into database prior to communicates with any devices, not the way applicants claim that "**Obtaining** a PIN code form the user via the DCA, the PIN code identifying at least one device with which the first device is authorized to communicate". Necessary correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In these claims applicants mention **"obtaining a PIN code from the user via the DCA, the PIN code identifying at least one device with which the first device is authorized to communicate"**, which is generally narrative and indefinite with the invention. Applicants do not point out clearly which options include in the present invention by limitation. It is a general understanding to

any ordinary skill in the art that when the PIN code obtain from the user then that particular PIN code would authorize that particular user not any device. So, this limitation is controversial because if the PIN code authorized any device then that PIN code should be obtained from that device not from the user. Furthermore, **"at least one device"** is an ambiguous term to consider in view of the present invention. Is this "**one device**" is **first or second device**? Because the last part of claim limitation says, "....to establish the authenticated wireless communication between the first and second device". So, it is totally vague and indefinite to claim "at least one device" rather than clearly mentions "first or second device". The examiner will interpret these terms and limitations with the regarding claims as best understood for applying the appropriate art for rejection purposes. Appropriate correction needs to overcome the rejection.

Response to Arguments

7. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Hara (US patent publication 20030172283) in view of Laing et al hereafter Laing (US Patent 5534857).

9. As per claim 1, O'Hara discloses a method comprising the steps of: sending an initial signal by the first device to establish a wireless communication with the second device, the first device including only a data capturing arrangement ("DCA") as an input device interface with a user thereof (paragraph, 0010-0012, 0024); initiating an authentication process by the second device; obtaining a PIN code from the user via the DCA, the PIN Code identifying at least one device with which the first device is authorized to communicate (paragraphs, 0010-0012, 0021); performing a pairing process to compare the PIN code to entries in a database of authorized PIN codes (paragraphs 0010, 0019). He does not expressly disclose generating a link key to establish the authenticated communication between the first and second devices. However, in the same field of endeavor, Laing discloses generating a link key to establish the authenticated communication between the first and second devices (abstract, col. 1, lines 50-67).

Accordingly, it would been obvious to one of ordinary skill in the network security art at the time of invention was made to have incorporated Laing's teachings of establishing a link key with the teachings of O'Hara, for the purpose of suitably using the authenticated communication between these two devices (abstract, col. 1, lines 50-67).

10. As per claim 2, O'Hara discloses the method wherein the databases is stored in a memory arrangement of the second device (paragraphs 0010, 0019).

11. As per claim 3, O'Hara discloses the method wherein the first device is a mobile barcode scanner (abstract, paragraph 0030).

12. As per claim 4, O'Hara discloses the method wherein the first device communicates with the second device using Bluetooth technology (paragraphs, 0029-0030).

13. As per claim 5, O'Hara discloses the method wherein the obtaining step further includes the following substeps: scanning a barcode using the DCA, the barcode being provided by the user as the PIN code, and converting the barcode into the PIN code using a processor of the first device (paragraphs, 0010-0012, 0021).

14. As per claim 6, O'Hara discloses the method wherein the second device includes a wireless access point which communicates with the first device (abstract, paragraph 0030).

15. As per claim 7, O'Hara discloses the method wherein the first device includes an alerting
arrangement notifying the user when to enter the PIN code (paragraph, 0012, 0025).

16. As per claim 8, O'Hara discloses the method wherein the alerting arrangement includes at least one of a speaker emitting a predetermined sound and a set of LEDs emitting a predetermined lighting pattern (paragraphs, 0013).

17. As per claim 9, O'Hara discloses the method wherein the obtaining step includes the following substeps: limiting a time period for the user to enter the PIN code to a

predetermined time period, and refusing to accept the PIN code from the user when the predetermined time period has
expired (paragraphs, 0015-0016).

18. As per claim 10, O'Hara discloses the method wherein the pairing process includes the following substeps: compiling a providing first sample data, from a collection of random data, by the second device, the second device then providing the first sample data to the first device (paragraph, 0010-0012, 0024), generating second data, by the first device, a function of the first sample data, the PIN code and a hashing procedure; providing at least a portion of the second data by the first device to the second device (paragraphs, 0010-0012, 0021), generating third data by the second device as a function of at least one of the authorized PIN codes stored in the database, the second data received from the first device and the hashing procedure; comparing, by the second device, the second data received from the first device to the corresponding third data and when the second data received from the first device matches to the third data, generating an indication the pairing process is successfully completed (paragraphs 0010, 0019).

19. As per claim 11, O'Hara does not disclose the method wherein the link key is one of a temporary key which is effective only for a single session and a long-term key which is effective for multiple sessions between the first and second devices. However, Laing discloses wherein the link key is one of a temporary key which is effective only for a single session and a long-term key which is effective for multiple sessions between the first and second devices (abstract, col. 1, lines 50-67).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 11.

20. As per claim 12, O'Hara discloses the method wherein the step of: establishing a secure communication between the first and second devices using a predetermined encryption technology (paragraphs 0010, 0019).

21. As per claim 13, O'Hara discloses a system comprising: a first wireless mobile device including only a data capturing arrangement ("DCA") as an input device interface with a user thereof; and a second device receiving an initial signal from the first device to establish a wireless communication, the second device initiating an authentication process (paragraph, 0010-0012, 0024), wherein the first device obtains a PIN code from the user via the DCA, the PIN code identifying at least one device with which the first device is authorized to communicate (paragraphs, 0010-0012, 0021), wherein the first and second devices perform a pairing process to compare the PIN code to entries in a database of authorized PIN codes (paragraphs 0010, 0019). He does not expressly disclose generating a link key to establish the authenticated communication between the first and second devices. However, in the same field of endeavor, Laing discloses generating a link key to establish the authenticated communication between the first and second devices (abstract, col. 1, lines 50-67).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 13.

22. As per claim 14, O'Hara discloses the system wherein the second device includes a memory arrangement storing the database (paragraphs 0010, 0019).

23. As per claim 15, O'Hara discloses the system wherein the first device is a mobile barcode scanner (abstract, paragraph 0030).

24. As per claim 16, O'Hara discloses the system wherein the first device communicates with the second device using Bluetooth technology (paragraphs, 0029-0030).

25. As per claim 17, O'Hara discloses the system wherein the first device scans a barcode using the DCA, the barcode being provided by the user as the PIN code, a processor of the first device converting the barcode into the PIN code (paragraphs, 0010-0012, 0021).

26. As per claim 18, O'Hara discloses the system wherein the second device includes a wireless access point which communicates with the first device (abstract, paragraph 0030.

27. As per claim 19, O'Hara discloses the system wherein the first device includes an alerting arrangement notifying the user to enter the PIN code (paragraph, 0012, 0025).

28. As per claim 20, O'Hara discloses the system wherein the alerting arrangement includes at least one of a speaker emitting a predetermined sound and a set of LEDs emitting a light in a predetermined lighting patterns (paragraphs, 0013).

29. As per claim 21, O'Hara discloses the system wherein the pairing process includes the following substeps: compiling a first sample data, from a collection of random data, by the second device, the second device then providing the first sample data to the first device (paragraph, 0010-0012, 0024), generating second data, by the first device, as a function of the first sample data, the PIN code and a hashing procedure; providing at least a portion of the second data by the first device to the second device, generating third data by the second device as a function of at least one of the authorized PIN codes stored in the database, the second data received from the first device and the hashing procedure (paragraphs, 0010-0012, 0021); comparing, by the second device, the second data received from the first device to the corresponding third data and when the second data received from the first device matches to the third data, generating an indication the pairing process is successfully completed (paragraphs 0010, 0019).

30. As per claim 22, O'Hara does not disclose the system wherein the link key is one of a temporary key which is effective only for a single session and a long-term key which is effective for multiple sessions between the first and second devices. However, in the same field of endeavor, Laing discloses the system wherein the link key is one of a temporary key which is effective only for a single session and a long-term key which is effective for multiple sessions between the first and second devices (abstract, col. 1, lines 50-67).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 22.

31. As per claim 23, O'Hara discloses the system wherein the first and second devices establish a secure communication using a predetermined encryption technology (paragraphs 0010, 0019).

32. As per claim 24, O'Hara discloses a wireless mobile device comprising: a processor; a wireless communication arrangement; and a data capturing arrangement ("DCA") being the only input device interface for a user thereof (paragraph, 0010-0012, 0024), wherein the processor generates a request for establishing an authenticated wireless communication, the request being forwarded to the further device via the communication arrangement, the communication arrangement receives from the further device a first sample data, compiled from a collection of random data, and a request for second data, the DCA obtaining a PIN code from the user, the PIN code identifying at least one device with which the mobile device is authorized to communicate, the processor generating the second data as a function of the PIN code, the first sample data and the hashing procedure, the second data being provided, by the mobile device, to the further device (paragraphs, 0010-0012, 0021), wherein the further device generates third data as a function of at least one of the authorized PIN codes stored in a database, the second data received from the mobile device and the hashing procedure, (paragraphs 0010, 0019). He does not expressly disclose generating a link key to establish the authenticated communication between the first and second devices. However, in the same field of endeavor, Laing discloses generating a link key to establish the authenticated communication between the first and second devices (abstract, col. 1, lines 50-67).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 24.

33. As per claim 25, O'Hara discloses the mobile device wherein the mobile device is a mobile barcode scanner (paragraphs 0010, 0019).

34. As per claim 26, O'Hara discloses the mobile device wherein the mobile device communicates with the further device using Bluetooth technology (abstract, paragraph 0030).

35. As per claim 27, O'Hara discloses the mobile device wherein the DCA scans a barcode which is provided by the user as the PIN code, the processor converting the barcode into the PIN code (paragraphs, 0029-0030).

36. As per claim 28, O'Hara discloses the mobile device wherein an alerting arrangement notifying the user to enter the PIN code (paragraphs, 0010-0012, 0021).

37. As per claim 29, O'Hara discloses the mobile device wherein the alerting arrangement includes at least one of a speaker emitting a predetermined sound and a set of LEDs emitting a predetermined lighting pattern (abstract, paragraph 0030).

Conclusion

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad w. Reza whose telephone number is 571-272-6590. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **MOAZZAMI NASSER G** can be reached on **(571)272-4195**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Nasser G Moazzami/ Mohammad Wasim Reza

Supervisory Patent Examiner, Art Unit 2136 AU 2136